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Afroasiatic Cases
and the Formation of Ancient Egyption Constructions
with Possessive Suffixes

by

J. Callender

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AFROASIATIC CASES

AND THE FORMATION OF ANCIENT EGYPTIAN CONSTRUCTIONS

WITH POSSESSIVE SUFFIXES

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Egyptian verbal forms using possessive endings for subject marking did
indeed originate in possessive constructions as a result nominalization
indicating the "product" of the action verbs. The various nuances of
tense and mood shown by these verbal constructions can be explained by
positing case endings for the result nominalizations, which correspond
to the case endings of proto-Afroasiatic both phonologically and
syntactically. Parallels to this are found in Arabic and Beja.

TABLE OF CONTENTS

1. BACKGROUND

One of the most striking observations that may be made about the structure of the Egyptian
verbal system in the Old and Middle Kingdom is that it seems to involve subject pronouns that
are otherwise used to express possession. The following paradigm shows the affinities of
this set of pronouns with the comparable one of other languages of this family:

(1)   pr.ỉ   'my house'

       pr.k   'your (m.) house'

       pr.t̠   'your (f.) house'[1]

       pr.f[2]   'his house'

       pr.s   'her house'

       pr.n   'our house'

       pr.t̠n[3]   'your house'

       pr.sn   'their house'

The endings -t̠ 'your (f.)' and -t̠n 'your (pl.)' represent palatalized forms of -k and -kn, both familiar to Semitists. The masculine singular ending -f 'his' seems to be a reflex of the -šu/hu ending attested in Semitic. The endings -s 'her' and -sn 'their' will bring the Akkadian endings -ša and -šunu to mind.

These pronouns are also attested as objects of prepositions in Egyptian:

(2)   ḥr.ỉ   'on me'

       ḥr.k   'on you (m.)'

       ḥr.t̠   'on you (f.)'

       ḥr.f   'on him'

       ḥr.s   'on her'

       ḥr.n   'on us'

       ḥr.t̠n   'on you (pl.)'

       ḥr.sn   'on them'

The word for 'on', ḥr seems certainly to be identical with the word ḥr 'face'. Thus, ḥr.ỉ must originally have meant 'my face' or 'my upper side', and must go back to a possessive construction. Other Egyptian prepositions seem to have a nominal origin as well. Thus, for Egyptian, it seems highly likely that this pronoun series originally served only to indicate possession.

Thus, when one finds verb forms using the same set of pronouns as subjects, as in (3)[4] (f3ỉ-rmt̠ 'the man will carry'):

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[1]This -t̠ derives from palatalized -k (to be reconstructed as -ku ??; cf. Gelb (1969), 184). To be compared is the parallel development in certain modern dialects of spoken Arabic, cf. Iraqi colloquial kitabic 'your (f.) book'.

[2]The suffix -f is probably related to the bilabial demonstrative series pw/pn/pf and the Beja demonstrative ben- 'this'. Talmy Givón, in an oral communication, however, suggests that it can be related to Proto-Afroasiatic šu 'he'.

[3]I.e. palatalized kn, cf. Beja -kna.

[4]In quotations from Egyptian texts I will use the following symbols for the various forms of the sḏm.f: - (hyphen) for the prospective sḏm.f (i.e. sḏm-f), + (plus sign) for the indicative sḏm.f (i.e. sḏm+f) and = (equals sign) for the circumstantial sḏm.f (i.e. sḏm=f).

(3)   *ꜣꜣỉ-ỉ*   'I will carry'

       ꜣꜣỉ-k   'you will carry'

       ꜣꜣỉ-ṯ   'you (f.) will carry'

       ꜣꜣỉ-f   'he will carry'

       ꜣꜣỉ-s   'she will carry'

       ꜣꜣỉ-n   'we will carry'

       ꜣꜣỉ-ṯn   'you (pl.) will carry'

       ꜣꜣỉ-sn   'they will carry'

one suspects that these verb forms also may have originated as possessive constructions. In the following sections, it will be argued that these verb forms indeed originated in possessive constructions. It will be argued that the verbal stem originated as a result nominalization, indicating the "product" of the action of the verb, such as may be illustrated by the derivation of the result nominalization "load" being derived from the verb 'carry'. Lastly, it will be argued that the various nuances of tense and mood shown by these verbal constructions can be explained by positing case endings for the result nominalization which correspond to the case endings of Proto-Afroasiatic both phonologically and syntactically.

2. THE IDENTITY OF THE VERBAL STEM

Although four separate constructions will be examined in this essay, certain common features can be profitably examined together. These common features together with what was once taken as an identity of form for many years caused these four constructions to be considered one form, conventionally called the *sḏm.f* form. It was subsequently shown by Polotsky that this rubric actually concealed four distinct forms distinct both morphologically and syntactically. Following his terminology, we will then consider three forms: (1) the prospective *sḏm.f* (2) the circumstantial *sḏm.f* and (3) the indicative *sḏm.f*.

The first attempt to identify the constituents of the *sḏm.f* form was that of Sethe (1918) who proposed that in a sentence such as (4)

(4)   *ꜣꜣỉ-k sy*   'you will carry her'

one is dealing with a construction with an active participle (*ꜣꜣỉ* 'carrying') and that the total construction originally meant 'you are one who is carrying her'. Such an explanation overlooks two cardinal points: (1) the subject pronoun -*k* elsewhere serves as a possessive, as we have seen earlier, and (2) the direct object pronoun *sy* elsewhere serves as a subject pronoun. This latter pronoun serves as the subject of adjectival predicates, as in (5): .

(5)   *nfr.sy*   'She is beautiful (*nfr*)'

In order to reconcile these two uses of the "dependent pronoun" *sy* for both subject and object, it seems most likely to suppose that in verbal sentences as well as adjectival sentences the dependent pronoun originally functioned as the subject. Since, in this reconstruction, *ꜣꜣỉ-k* would then represent the predicate, the presence of the pronoun -*k* elsewhere used as a possessive, would logically lead to the conclusion that *ꜣꜣỉ-* is a noun and the entire construction a sentence with nominal predicate. The noun in question could hardly refer to an action since that would entail an original meaning of 'she is your act-of-carrying' which would seem to violate the selectional restrictions that prevent the identifying of persons and actions. A more plausible alternative is that *ꜣꜣỉ-* represents a result nominalization, that is, the thing which is or has been carried, i.e. a load. Thus one could have the following semantic correspondence:

(6) ḳȝỉ-k ṥy = (originally) 'she is your load'.

This hypothesis, which seems correct as far as it goes, may be considered the standard hypothesis of the origin of the ṥdm.f form. It was first proposed by Sethe (1892) and subsequently developed by him (1918). It is explained in detail in Gardiner (1966) 411.1 and has received its fullest study in Westendorf (1953). It has come to be termed the RELATIVE FORM HYPOTHESIS, as in traditional Egyptian grammar, the result nominalization (load) is considered a RELATIVE FORM, the usual term for a passive participle with attached subject pronouns.

One obstacle to the acceptance of this hypothesis has to do with the origin of the base in a passive participle. It might be thought that this would limit such constructions to transitive verbs, yet these constructions are used for intransitive verbs as well. The answer undoubtedly lies in the fact that Egyptian allows extended passive constructions as does English, in constructions such as 'the person who was telephoned for'. Compare the following Egyptian passive participles used in an extended sense in which the head noun is other than the direct object of the relative clause. For the benefit of Semitists the Arabic parallel (7c) is added for comparison:

(7) a. ʿnḫ-(w) ỉm.f   'the one (scil. house) that one lives in/is lived in'
                            'the one (scil. means of livelihood) that one lives by'

     b. ʿnḫ-(w).ṥ ỉm.f   'the one she will live in/by means of'

     c. al-maskūnu fīhi   'the one that one will live in'

As the alternative translations of (7)a show the Egyptian preposition m ~ ỉm is a polyvalent locative or instrumental. One also finds the pronominal form ỉm without a resumptive pronoun (Gardiner (1966) §385) in the meaning 'thereby' and 'there(in)'. One must conceive of a situation in which ỉm 'thereby' is misinterpreted as ỉm 'there(in)'.

(8) ʿnḫ-(w).ṥ ỉm ḥr tȝ   'the one that she will live THEREBY is the upper side
                            (ḥr) of the earth'

                          = 'she will live THERE on the earth'

Once the phrase ḥr tȝ 'the upper side of the earth = on the earth' was interpreted to refer to the same circumstances referred to by ỉm 'there', the ỉm could be omitted as redundant. Thus the passive participle-relative form would lose any overt marking of the relationship in which the referent stood to the head noun, i.e. even in the case of intransitive verbs it would be interpreted as a direct object relative clause. Thus a sentence like (9) would be felt as completely analogous to (6) (ḳȝỉ-k ṥy 'you will carry her').

(9) ʿnḫ-ṥ ḥr tȝ   'she will live on the earth'

Thus, the relative form hypothesis must be modified along something like the above lines to account for the presence of intransitive verbs in the various ṥdm.f forms. Such an EXTENDED RELATIVE FORM hypothesis, as I have developed it here, would account for the presence of intransitive verbs in the ṥdm.f form. It will be remembered, however, that it is predicated on the false assumption that the ṥdm.f form is a single form. The differences in tense and aspect that obtain among the four discrete forms that we now know exist hidden in this form must be accounted for somehow. The relative clause hypothesis is, therefore, incomplete.

An alternative hypothesis has been developed in Janssens (1972), however, that may be termed the prefix-conjugation hypothesis for the origin of the ṥdm.f form. It runs something as follows: (1) Both in Old Egyptian and Late Egyptian (although not in Middle Egyptian) one finds sporadic instances of a prefix ỉ- in ṥdm.f forms that seem clearly reminiscent of the prefixes of the Semitic imperfect in the third person.[5] Thus forms such as ỉ-dd.f (< dd 'say')

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[5]For the rare Middle Egyptian survivals, see Gardiner (1950), § 272.

would be comparable to Arabic *ya-qtulu* forms. Secondly (2), the suffixes outlined in example (1) as possessive suffixes also serve as direct object forms in many Semitic languages, although not generally in Egyptian except as direct objects of the infinitive. Thirdly, (3) at some period a full set of prefixed forms, such as *a-, ta-, ta....ī, ya-,* etc. known in Semitic, must have been reduced to a single form for all persons and numbers, i.e. *ya-,* or something similar, and written sporadically as *ī-*. Thus 'you will carry her' would have originated as in (10):

(10)   *ī-ḟ3ī-k ṣy* 'one will carry you in regard to her'

This is difficult to accept, although it makes better sense if one assumes that the verbal stem is factitive, and that the original meaning would have been 'one will make you a carrier (i.e. Arabic *ḟaᶜᶜala,* Heb. *piᶜēl*) in regard to her'. This hypothesis has further been developed to account for the differences in tense and aspect of the four forms of the *ṣdm.ḟ* on the basis of the different forms of the Semitic prefix conjugation, i.e. the indicative, subjunctive and jussive forms of Arabic, for example.

This prefix-conjugation hypothesis encounters difficulties, however, that make it far less preferable to the extended relative clause hypothesis.[6] The prefix *ī-,* first of all, appears elsewhere than in just the *ṣdm.ḟ* form. Most notably it appears in relative forms and in active and passive participles. Thus even superficially it has as much right to be considered a nominal prefix as a verbal prefix.[7]

There is also the hypothesis of Sethe (1892) that this *ī-* prefix is simply a graphemic representation of an epenthetic vowel needed to pronounce otherwise unpronounceable initial consonant clusters. On the Semitic side, there is also the hypothesis that the imperfect forms represent original nominal sentences, i.e. that

(11)   *ya-qtulu-hu* 'he kills him'

originally came from 'he is the killer of him'. If something along these lines were indeed to turn out to be the case, then the point of departure for the prefix conjugation hypothesis would be seen to dissolve before one's eyes into a nominal construction, and one would be no better off than before with the relative clause hypothesis.

Secondly, within Egyptian, the suffix pronouns are not used as direct objects, (except as objects of the infinitive, where a possessive pronoun hypothesis is still preferable because simpler).[8] Likewise a hypothesis of a nominal origin for the Semitic imperfect (and perfect) would also explain the use of these pronouns as direct objects in Semitic, and still provide for an original exclusive use as possessives.

Thirdly, the neutralization of personal prefixes to a common *ī-* seems unlikely, although it cannot be excluded. The use of the object pronoun *ṣy* in the meaning of 'in regard to her' or anything remotely approaching it is rare, although Gardiner cites an example of the use of the dependent pronouns as a second object:

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[6] In commenting on the first draft of this paper, Dr. Carleton Hodge maintained that at the earliest known stage of Egyptian the reed-leaf 𓇋 is consistently used to transliterate Semitic *ī*. If further investigation should show that this view is correct, it would furnish a further argument against linking the Egyptian prosthetic *ī* to the Semitic prefix conjugation.

[7] This thesis was ably disputed by Thacker (1954), 56ff, who points out that the pro(s)thetic *ī-* is limited to verb forms (including participles and relative forms) and further, it is almost exclusively limited to *secundæ litteræ* verbs. He reconstructs these verbs, correctly in my opinion, as having a weak medial radical *y* (i.e. *mediæ yod*), which under certain conditions of syllable division metathesizes with the first consonant and is sporadically recorded as a prosthetic *ī* in the writing of the word.

[8] I.d. *mrī+ī m33.ṣ* 'I want to see her' would have the grammar of 'I desire her seeing'.

(12) *rdit.f sw r r-pᶜt ḥ3ty-ᶜ*   'His appointing (*rdit*) him to be prince...'
                                        (Gardiner 1966 §301)

Lastly, in order to make the prefix conjugation hypothesis work, one also requires something
comparable to a factitive stem hypothesis. As far as I can tell, there seems to be no evidence
of this as yet.

Thus, in view of the difficulties sketched above, it seems preferable to reject the prefix
conjugation hypothesis in favor of the extended relative clause hypothesis, incomplete as it
is. Neither hypothesis would explain, in and of themselves, the differences of mood tense
and aspect to be found in the four forms of the *sdm.f*, nor why the verb stems in the four forms
are different. The following table illustrates the difference in stem form and will serve as
a basis for a closer examination of the origins of the individual tenses:

(13)

	VERB CLASSES				
	3æ lit. 3æ lit.	2æ gem. 3æ inf.	2æ gem.	'Give'	'Come'
	√sdm	√mrī	√kbb	√rdī	√iwī
a. Indicative *sdm.f* (used after *n* 'not')	*sdm*	*mr(y)*	*kb*	*rdi*	*iw*
b. Prospective *sdm.f* (used after *rdi* 'cause' 0	*sdm*	*mr(y)*	*kb*	*di*	*iwt*
c. Circumstantial *sdm.f* (used after *ir* 'if')	*sdm*	*mr*	*kbb*	*di*	*iw*

3. THE PROSPECTIVE *SDM.F*

This form seems originally to have had an optative and future meaning. During the course of
the Middle Kingdom it serves to express the optative 'let him hear', clauses of purpose ('so
that he may hear') and the clause objects of a number of verbs with causative meaning, e.g.
rdi 'cause' and *wd* 'command'. With the passage of time the form was replaced by periphrases
using the verb *iri* 'do, make, function as', which show survival into Coptic in a form which
is phonetically highly reduced. The prospective *sdm.f* of a number of verbs does survive, how-
ever, in a number of lexicalized compounds which once involved the verb *rdi* 'cause':[9]

(14) *tmesyó-s*   'cause that she give birth'

One concludes from such compounds that the prospective *sdm.f* form (e.g. *msi-s* 'that she give
birth') must have ended in a final stressed vowel, and that this vowel, in Coptic a short *o*,
must be reconstructed as *á* for earlier stages of the language on the basis of known cuneiform
transcriptions of Egyptian words. Thus (14) can be reconstructed as (15)

(15) *(ri)d(yat) m˘syá-s*

On the basis of the extended relative form hypothesis, it was concluded that the verb stem was
a noun (a passive participle/result nominalization). The vowel between the stem and the suffix

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[9]The basic meaning of this verb seems to be 'put, place' and other meanings are secondary,
e.g. *rdi n* 'place for' = 'give to'; *rdi* + prospective *sdm.f* 'put (matters) so that...' =
'cause that...'.

pronoun, could then be a derivational ending, a case ending, or a coalescence of both. That it is only a derivational ending seems unlikely, as we possess survivors of other *sdm.f* forms which we will discuss later, that have different vowels: the indicative *sdm.f* form, for example, survives in the descendant of the expression *n ḫḫ+k* 'you do not know' as (16)

(16)   Sahidic: *mešā-k*

Akhmimic: *meḫē-k*

The Coptic *a/e* alternation has to be reconstructed as either Egyptian *i* or *u*. As I will argue below, other evidence suggests that the original vowel of this form was *u*. The evidence that the stems of the indicative and prospective *sdm.f* are identical is not, strictly speaking, provable, since they show different forms for certain irregular verbs, as may be seen in (13). These verbs, however, are only three in number, and two show a *t* suffix for the prospective *sdm.f* form that almost certainly represent suppletive forms. The third verb *rdi* occasionally shows an initial *r*, but this looks very well as if it might be conditioned by laws of stress. In any case, both stems represent punctiliar acts.

It cannot be ruled out that the stressed *ā* ending of the prospective *sdm.f* might represent the coalescence of some derivational ending with a case ending, but since we are ignorant of what such an ending might have been from other evidence, this is a possibility that cannot be pursued. The possibility that this stressed *a* vowel represents a case ending, however, can be tested with syntactic evidence, since the vowel *-a* is attested in Akkadian and Arabic as the marker of an accusative case. If a parallelism can be shown to exist between the use of the Egyptian prospective *sdm.f* form and the use of the accusative case in these languages, then this would constitute supporting evidence.

As we have mentioned earlier, there are three principal uses of the prospective *sdm.f* form, the optative (17), the causative object (18), and that of the purpose clause (19):

(17)   (optative)   *f3i-k sy*   'may you carry her'

(18)   (causative object)   *iw rdi.n.i f3i-k sy*   'I have caused you to carry her'

(19)   (purpose clause)   *iw.k iwi.ti f3i-k sy* 'You have come in order (for you) to carry her.'

As is well known, the direct objects of transitive verbs fall into the accusative case. Examining the use of the accusative of verbal nouns in Arabic, for example, one can immediately point to a parallelism of usage after causative verbs.

(20)   *laqad sabbab-tu himlat-a-ka*
       particle caused-I load-ACC.-your
       'I caused your load'

(21)   *laqad nazzam-tu rihlat-a-ka*
       particle arrange-I journey-ACC.-your
       'I arranged your journey'

(22)   *lan ʾu-dabbiru ʾiqāmat-a-ka fī Miṣra*
       not-Fut. I-arrange stay-ACC.-you in Egypt
       'I will not arrange your stay in Egypt' (= 'for you to stay')

(23)   *ʾaʿṭā lahu hurriyat-a-hu*
       he-gave to-him freedom-ACC.-his
       'He gave him his freedom' (= 'caused that he be free')

Some Egyptian examples are: (Gardiner (1966), §70)

(24) *dꞮ-ꞯ ꞩdm-ṯn*
      cause-PROSPECTIVE-I hear-PROS.-you(pl.)
      'I will cause you to hear'

(25) *rdꞮ=tw ꞮrꞮ-ꞯ hrw m ꞯ33*
      cause-CIRCUMSTANTIAL-one spend-PROS.-I day in Yaa
      'with One (= the king) causing that I spend a day in Yaa'

The use of the prospective *ꞩdm-ꞩ* as a clause of purpose can also be shown to have parallels in
Arabic. The most common use of such a clause of purpose is after a verb of motion, such as
'come', 'go', 'arise', etc. The use of a verbal noun in the accusative is no doubt an exten-
sion of the use of the accusative to designate the goal of the motion, which would normally be
a place. I could find no examples of a result nominalization used in such a way, but examples
of action nominalizations and active participles can give some idea of the point of departure
of the Egyptian tense's development:

(26) *ꞌa-qūmu ꞥahu taᶜẓꞮm-an ꞥi-ꞌustād̲-ꞯ*   (Wright (1964) II, 62b)
      I-stand to-him honor-ACC. to-professor-my
      'I stand up to honor my professor' (= 'in order that I might honor...')

(27) *jāꞌa-nꞮ ᶜAmru ṭāꞥib-an ꞌadab-an*   (Wright (1964) II, 65c)
      came-me Amr asking-ACC. instruction-ACC.
      'Amr came to me asking for instruction.' (= 'in order that he might ask...')

This use of the adverbial accusative normally indicates concomitant action. It is only in
those cases in which the initial action (i.e. 'stand up', 'come') represents a logical
preliminary to the other action ('honoring', 'seeking') that such accusatives are equivalent
to purpose clauses. Egyptian examples are: (Gardiner (1966), §450.4)

(30) *ꞯnt- n.ꞩ Hp ḥtpt.ꞩ, wnm-ꞩ m rꞩ.ꞩ, mꞩ-ꞩ m ꞯrty.ꞩy*
      bring-PROS. to-him Hapi offerings-his, eat-PROS.-he with mouth-his, see-PROS.-he
          with eyes-his
      'May Hapi bring him his offerings, may he eat with his mouth, may he see
          with his eyes...'

(31) *dꞮ-k rꞥ.k n.ꞯ ḥt.ꞯ*
      give-Pros.-you as-for-you to-me property-my
      'Now you must give me my property!'

(32) *ꞩabr-an ꞥa jazaꞌ-an*   (Wright (1964) II, 73.b)
      patience-ACC. not excess-ACC.
      'Be patient and do not grieve immoderately' (lit. 'By patience and not by
          excess grief')

(33) *ḥadꞮth-a-ka!*   (Wright (1964) II, 75.d)
      story-ACC.-your
      'Your story!' (= 'May you tell us your story!')

This last example contains a result nominalization, in that the STORY is the result of the
act of telling, declined in the accusative case, and modified by a possessive pronoun; a
construction, in short, perfectly parallel to the one we are positing as the origin of the
prospective *ꞩdm.ꞩ* form. Wright describes these hortatory accusative expressions as follows
(Wright (1964) II, 72):

This accusative not infrequently depends upon a verb which is understood. This happens:

> (a) In phrases expressive of command (positive or negative), wish, reproach (worded
>   interrogatively), praise, salutation and the like, in which we must supply the
>   verb from which the noun in the accusative is derived and to which it serves as
>   *al-maf ͨulu al-muṭlaq*.

> (b) (p. 74) In various other cases, in which the verb to be supplied is not that
>   whence the noun in the accusative is derived, but may be easily guessed from
>   the manner in which the noun is uttered and the circumstances of the speaker.

Wright's assertion that such constructions are not infrequent allows a certain additional
plausibility to the possibility that such exclamatory constructions ended up as part of the
Egyptian verbal paradigm, expressing optative meaning, replacing whatever had served that
purpose previously (some form of the Afroasiatic prefix conjugation???).[10]

In conclusion, the uses of the prospective *sdm.f* have syntactic parallels with the accusative
in Arabic. The optative use of the prospective *sdm.f* is parallel to the hortatory use of the
accusative, most recently discussed. The prospective *sdm.f* after causative verbs is perfectly
parallel to the use of the accusative as the direct object of all transitive verbs, including
causative ones. Lastly the prospective *sdm.f* in purpose clauses shows its parallels with the
uses of Arabic adverbial accusatives. Thus one seems justified in identifying the recon-
structed vocalic ending -*a* as the ending of the Afroasiatic accusative.

4. THE INDICATIVE *SDM.F* ('HE HEARD')

This verb form originally served, as it appears, as a past tense form, and may, in fact, have
been the only verb form to do so in the earliest stages of Egyptian. In the earliest
attested stage, however, this verb is limited to transitive verbs in their positive forms,
although no such restriction is placed on negative forms. By the late V dynasty, the positive
use of this verb form with transitive verb forms was well on its way to disappearing,[11] so
that by the Middle Kingdom, one finds the indicative *sdm.f* form almost exclusively limited to

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[10]An alternative possibility is that the ending -*a* may be an original suffixed vocative particle.
This particle has been discussed in detail in Wehr (1952), 598-620. I have the kindness
of Dr. Arne Ambros to thank for this reference, as well as for numerous other helpful
comments on the first version of this paper. Wehr's thesis is that the peculiar behavior
of the case endings of the elative (e.g. *akbaru* 'greater, very great') which in some en-
vironments are diptotic, lacking a special genitive form, and in others triptotic, can best
be explained by assuming the construction originated in an embedded interjectional phrase.
According to this view, *a ͨǧabu* (diptotic acc./gen. *a ͨǧaba*) would have come from a phrase
a ͨaǧab(a) 'Oh, marvel, (oh)!' The optional presence of a final vocative *a* would have been
superficially similar to the accusative ending, and the *u/a* alternance may have produced an
eventual paradigmatization of this form as a diptote noun, and then by the force of analogy,
a genitive would have been created for it in some environments, but the full conversion
of it into a triptote would not have been completed by historical times.

Such an interjection *a* is almost certainly to be related to the Egyptian interjection *3*, but
there seems to be no real reason to relate the hortatory accusatives posited as the basis
of the prospective *sdm.f* in its absolute use as going back to an original elative. On the
Arabic side the hortatory accusative is nunated (cf. example (32)) whereas the elative is
not. On the Egyptian side, there is no evidence that the vowel of the prospective *sdm.f*
was long (i.e. *a*) although, this, in and of itself, would not be conclusive.

[11]Cf. Edel (1955) §536 for the *sdm.n.f* form replacing *sdm.f* as a "historical perfect."

negative forms. The few positive forms attested seem consciously archaizing (34)[12] in contrast to the plentifully attested negative forms (Exx. (35)-(37)):

(34) *rdí+wí ḥm.f r zḫ3 ny tm3 ny tm3, ḥzí+wí ḥm.f r- ᵓ3t-wrt* (Gardiner (1966) §450.1)
placed me majesty-his for scribe of cadaster, praised me majesty-his very-much
'His Majesty appointed me as the scribe of the cadaster and His Majesty praised me very much.'

(35) *n rdí+í s3.í n ᵓ3m* (Gardiner (1966), §455)
not give-I back-my to Asiatic
'I did not show my back to an Asiatic.'

(36) *n rḫ+í íní.(y) wí r ḫ3st tn* (Gardiner (1966), §455)
not know-I bringer me to land this
'I do not know (= have not learned) who brought me to this (foreign) land.'

(37) *íw sñḥ.n.í íw-m-ítrw...n ítí+í s3t s* (Gardiner (1966), §455)
particle nourish-PAST-I Imiotru... not take-I daughter man
'I nourished Imiotru....I did not take away a man's daughter...'

Unlike the case of the prospective *sdm.f*, no extensive lexicalizations remain to allow us to reconstruct the characteristic final‾vowel of this form with great certainty. With the exception of the much reduced Coptic form *əmpe* 'did not', deriving from *n p3í+(f)* '(he) did not do (in the past)', the only survivors of the indicative *sdm.f* are certain fixed expressions derived from the verb *rḫ* 'know'. These are the forms (a) *meša̅=/mehe̅=* (Crum (1939), 201b-202a) and (b) the Fayyumic form *emeše̅i/emeše̅ie* (Crum (1939), 56a).

The forms *mehe̅-* (Akhmimic) and *meša̅-* (Sahidic) are generally accepted as the Coptic descendents of the Late Egyptian form *bw rḫ-*, itself descended from the Middle Egyptian form *n rḫ-*. These occur with suffix pronouns, and in the reduced forms *mehe/meše*, before nouns, in the meaning 'not know' (Fr. *ignorer*) and before the second person masculine singular suffix *-k*, in the derived meaning of 'perhaps', i.e. 'you do not know'. As the such they represent the descendents of the indicative *sdm.f* form, i.e. 'know' = 'have learned'. The correspondence of the Akhmimic stressed *e* together with the Sahidic *a* allow a reconstruction of the final vowel as either short *u* or *í*.

Another related form, known only from Fayyumic, seems to indicate that the vowel to be reconstructed is a short *u*. The form *emeše̅i* (variant: *emeše̅ie*) 'unless, except' seems to derive from a compound expression: *íw bw rḫ.í (í3)* in Late Egyptian (= Middle Egyptian *íw n rḫ+í (í3)*) 'whereas I do not know (whether)'. If this etymology is correct,[13] then the Fayyumic long *e̅* vowel (= *H e̅ta*), would require reconstructing the stem vowel as *u*, the regular correspondence for Coptic *e̅* in all dialects.[14]

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[12] In some of these examples one has to reckon with early occurrences of the Late Egyptian *sdm.f* form derived from *sdm.n.f* by loss of *n*.

[13] One should compare the occasional parallel use of *mešak* to mean 'unless' (Crum (1939), 202a end) which occurs with a following (optional) negative. Examples without a negative are Miss 8, 255 'Perhaps you will be able to arise and < I bring you to the shrine > UNLESS his mercy catch up with you.'

[14] In addition to the rules for deriving ancient Egyptian *u* as given in Till (1955), §63, one may remark that Coptic *e* (*e̅ta*) always seems to derive from either *u* or *í* = + laryngeal/glide. Till's examples of *e̅ < í* are in part uncheckable (e.g. *re̅s*) as far as I can tell, or mistaken, as is the case for Sah. *ne̅t‾u* being derived from Egyptian **nít‾n*. The Bohairic form *no̅ten* points clearly to a reconstruction of **nut‾n* for this form.

The variant form *emešeie*, however, opens the possibility that the Coptic *i* may not represent the Egyptian first person singular suffix pronoun -*i*, but may derive from the particle *ie* 'whether'. This would require an etymology of 'whereas it is not known (passive *sdm.f*) whether..'. In such a case we would not be dealing with the indicative *sdm.f* at all, but with another tense, albeit probably related, the passive *sdm.f*. In the linguistic stage immediately preceding Coptic, Demotic, no examples of a passive *sdm.f* have hitherto been noted. This hypothesis, therefore, seems less probable.

In pursuance to the case hypothesis we are here developing, the vowel ending -*u* points to the origin of this verb form in an expression containing a result nominalization in the nominative case of Afroasiatic, for which the characteristic vowel is -*u*. Do there exist syntactic parallels that would support this contention?

Unlike the prospective *sdm.f*, the indicative *sdm.f* is limited to main clauses. It is not used in clauses of circumstance or purpose, as is the circumstantial *sdm.f* (genitive case, see below) or the prospective *sdm.f* (accusative case). All this points to its origin in a non-oblique case, and the nominative, or subject case, is imminently suitable. Compare the following sentences with nominal predicates in which the subject is a verbal nominalization:

(38)   Cl. Arabic: *raghbat-u-nā al-tadābīr-u (a)l-ātiyyah*
                      desire-NOM.-our the-measures-NOM. the following
                      'What we desire is the following measures:'

(39)   Arabic: *qiṣṣat-u-ka ḥawla mughāmarāt-a-ka amr-un la yuṣaddaq*
                  story-NOM.-your about adventures-GEN.-your matter-NOM. not believable
                  'Your story about your adventures is an unbelievable affair.'

(40)   Beja: *itāmti khē dāī-b-i*
               eating+NOM. for-me good-is
               'Eating is good for me.'

Thus, the original etymology of the indicative *sdm.f* would be along the following lines:

(41)   *n {3ì+k sy*   'She is no load of yours' = 'you did not carry her'

The original indicative *sdm.f* form consisted of a result nominalization in the nominative case, serving as the subject of the sentence, or conceivably as its predicate nominal. As the subject, this result nominalization, would be interpreted to refer to an action already completed, unlike the prospective *sdm.f* whose main clause usage has been derived from a hortatory accusative, expressive of a desired action, rather than one that has already occurred. This is due to the fact that the subject of a sentence is presumed to have already come into existence if it has somehow been made specific, as, for instance, by a demonstrative or genitive modifier. Since the result nominalization that lay at the basis of the indicative *sdm.f* was indeed made specific by the suffix pronoun or noun attached as a genitive, the "load" of our paradigm was felt to be one that was already in existence, and consequently one that was the result of an act of carrying that had already taken place. Thus, a phrase in subject position, composed of a result nominalization specified by a genitive phrase would refer to an act in the past only. In such a way one can explain why the indicative *sdm.f* refers to the past.

5. THE CIRCUMSTANTIAL *SDM.F* ('WHEN HE HEARS')

This verb form originally could be used as a clause of circumstance with or without introductory particles. Used absolutely without an introductory particle, it is commonly found after verbs of perception, in sentences of the sort 'I found him (WHILE HE WAS) DOING such-and-such'. This absolute usage seems to have been a part of the spoken language of the Old Kingdom, but

comes to be confined to certain stereotyped expressions whose extremely formal tone suggests that they were no longer a part of the spoken language. The letters of the XI dynasty farmer Hekanakhte to his son,[15] which are, to all appearances, written in informal language, show no evidence of this absolute use of the circumstantial *sḏm.f*.

On the other hand, introduced by the particle *ir* 'as to' the form survived for a longer period, only to be eventually replaced by a periphrastic construction with the verb *iri* 'do' by Coptic times (i.e. *ef-šan-sōtəm/ef-təm-sōtəm*). In this periphrastic form the circumstantial *sḏm.f* does indeed survive (*ef-*) but in such a state of phonological reduction as a result of loss of stress, that one cannot draw from it any conclusions about the original vowels of the verb form. There is, however, another survival of the particle *ir* + circumstantial *sḏm.f*, in which the vowels are better preserved, namely the idiomatic expression 'if (he) wishes' which in Sahidic shows the form *ehnâ=(f)* and in Fayyumic, *ehnê=(f)*. This construction probably goes back to Middle Egyptian *ir ḥn=f* 'if he determines',[16] and the alternation *a/e* of the final vowel of the Coptic construction, requires us to reconstruct the original final vowel as **i* for Middle Egyptian.

Pursuing the line of thought that one is dealing with original case endings in these verbal constructions, a reconstructed short *i* directs our attention to the genitive case, which in Arabic, Akkadian and Beja shows this vowel, and which must probably be reconstructed for Afroasiatic as a whole. Do there exist uses of the genitive case in these Afroasiatic languages that parallel the uses of the circumstantial *sḏm.f* form in Egyptian?

The basic use of the circumstantial *sḏm.f* to be accounted for is that of the clauses of circumstance: (examples are from Gardiner (1966), §454.1)

(42) *nn twt n.f, m33=tw.f*
     not-exist similar-one to-him see-CIRC.-one-him descend-CIRC.-he Asiatics
     'There is no-one like him when he is seen charging the Asiatics.'

(43) *mw m itrw, zwr+tw.f mri=k*
     water in river, drink+EMPHATIC-one-it wish-CIRC.-you
     'The water in the river--it is drunk is only when you wish.'

(44) *iri-t hrw nfr wn=t tp t3*
     make-PROSPECTIVE-you day good be-CIRC.-you on earth
     'May you have a holiday when you are on earth.'

The circumstantial *sḏm.f* is also the *sḏm.f* form used after *ir* 'as to when, if':

(45) *ir sdm=k nn....*   (Gardiner (1966), 150)
     as-to hear-CIRC.-you this
     'If you hear this...'

(46) *ir ikr=k, grg-k pr.k*   (Gardiner (1966), 150)
     as-to excell-CIRC.-you, establish-PROS.-you house-your
     'If you do well, you should marry.'

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[15]The papers can be found in James (1962).

[16]Polotsky, however, (1957), 232, suggests that one might want to go back to Brugsch's etymology *ir ḥnn=f* 'if he agrees'. Either etymology would work in the present hypothesis, since it is the final (case) vowel that is in question.

The more general circumstantial meaning 'such that' seems to lie at the basis of the compound form *iw sdm=f̧*, which contains the circumstantial *sdm.f̧* and has gnomic meaning: (Gardiner (1966), §463)

(47)   *iw r3 ny z nhm=f̧ sw*
       is mouth of man save-CIRC.-it him
       'The mouth of a man saves/can save him.'

In searching for parallels in other Afroasiatic languages, I was not able to find any absolute uses of the genitive in Semitic languages that might be compared with the Egyptian use of the circumstantial *sdm.f̧*, since circumstantial expressions occur mainly in the accusative. BEJA, however, shows a number of examples in which an absolute genitive phrase, i.e. one *wi* not introduced by a preposition, is used as a circumstantial expression. This Cushitic language, spoken in the Port Sudan area, uses the genitive with various types of expressions in ways unknown to the more familiar Semitic languages, where the case occurs only in con-struct genitive noun phrases or after prepositions. The fact that Beja shows genitive phrases used absolutely only heightens the feeling one has that it should be a language of particular interest to Egyptologists, having, for instance demonstratives with bilabials, cf. the masculine *bēn* and Egyptian *pn*, otherwise poorly attested in Afroasiatic. Thus one can have the genitive indicating the place of origin: (Reinisch (1893), §132a)

(48)   *aû Mogåลõ-i ếya?*
       who Mogalo-GEN. came
       'Who has come from Mogalo?'

(49)   *ay (< åw-i) temåswa*
       who-GEN. you-heard
       'From whom did you hear it?'

It can also indicate the place in which the action takes place or where time is spent: (§132c)

(50)   *Mekaลลõ-i niฺe*
       Mekallo-GEN. we-were
       'We were in Mekallo.'

(51)   *wõ arõ-i õrüh iฺe*
       the ship-GEN. his-son was
       'His son was on the ship.'

Similarly, it can express the cause of an action, or the means whereby it takes place: (§132d)

(52)   *rasås-i iya*
       bullet-GEN. he-died
       'He died by a bullet.'

(53)   *õ-Firis edir õ-mbaḍ-i*
       the-Persian he-killed the-sword-GEN.
       'He killed the Persian with the sword.'

Of all the uses, however, of the genitive case in Beja, the most important for the present purpose is the use of the genitive in time expressions: (§132e)

(54)   *wõ-âsir-i ếya*
       the-midday-GEN. he-came
       'He came at noon.'

(55) ō-ngreb-i wăkt-i mā²a
the-evening-GEN. time-GEN. come!
'Come at evening time!'

(56) tō-ḳāḍiga titā-i dĕhāy ēyān
the-fourth night-GEN. again they-came
'They came again on the fourth night.'

Such a usage with time expressions would be parallel to the use of the circumstantial ʃdm.ḟ used as a clause of circumstance. One could thus envision the origin of (44) as (57):

(57) The water in the river, it is drunk AT-THE-TIME-OF your desire.

The conditional uses ((45) and (46)) are no doubt also related:

(58) As to WHEN you are brave.... → if you are brave....

(59) As to WHEN you wish.... →   if you wish....

As far as the presence of the circumstantial ʃdm.ḟ in the iw ʃdm.ḟ form is concerned, the details are still obscure, but the solution seems to lie along the following lines. The element iw in other constructions seems to mean approximately 'the resulting situation/position' and may ultimately be etymologically related to the verb iwi 'come'. It is an obligatory constituent, for instance, of adverbial sentences in main clauses, which are formed along the lines of 'his situation is in the house' = 'he is in the house'. One would thus expect the iw ʃdm.ḟ form to have originally meant 'the situation is of his load' or possibly 'the situation is of-the-time-of-his load'. This is to say, 'he carries (regularly)' is to be understood as 'the state of affairs that has come to pass is well characterized by his load'. Thus the circumstantial ʃdm.ḟ serves to specify how the present situation is to be considered and categorized. In this use, one can cite the parallel use in Beja of the genitive case to categorize another noun (Reinisch (1893), §132f):

(60) ā-yam mōʃ-ī-ba
the-water salt-GEN.-is
'The water is brackish' (i.e. of salt)

(61) barūk hansīr-i nigīʃ-wa
you pig-GEN. dirty-are
'You are as dirty as a pit ' (i.e. of the dirtiness of a pig)

Thus from the evidence of the general use of the genitive in Beja, we have parallels for the uses of the circumstantial ʃdm.ḟ in Egyptian. Particularly striking is the use of the absolute genitive in time expressions and for categorization. Alien as the absolute use of the genitive will no doubt appear to those whose notions of the uses of the Afroasiatic cases are based on Semitic languages, still the Beja evidence must be taken into account. In view of the great temporal disparity between Beja, attested only in comparatively recent times, and the period before 3000 B.C. in which the formation of the Egyptian verbal system took place, one must be cautious. Still linguistic conservatism has been known to be incredibly tenacious at times, and it is just possible that, in spite of its relatively recent discovery, the Beja case system may represent one very close to that of Proto-Afroasiatic.

6. THE VERBAL STEM AND CASE ENDINGS

The difference in stem form shown in table (13) remains to be explained. There seem, *a priori*, two possibilities for explaining this difference. On the one hand, it may be that we are dealing with more than one result nominalization. This seems certainly true as far as the emphatic *sdm.f* is concerned. On the other hand, we may be dealing with allomorphic variants of the same result nominalization, (at least as far as the indicative, prospective, and circumstantial *sdm.f* are concerned) which would be conditioned by the case endings.

Two pieces of evidence support the contention that we are dealing with multiple result nominalizations. The irregular subjunctive forms *iwt-* and *int-* show a suffixed *-t* that appears nowhere else in the *sdm.f* system, although it occurs in a special tense *sdmt.f* that seems to have relatively past meaning ('he has heard'). These forms in *-t* seem to be either an importation from that system, or from the infinitives of these verbs, which both belong to a class with infinitives ending in *-t*. Thus we have to reckon with suppletion within the system at the outset.

Secondly, if one accepts the common assumption that identical consonants are written only once in Egyptian if there is no intervening stressed vowel between them (i.e. *ḳăbbăf* 'so that he may be cool' = *ḳb.f* < √*ḳbb*), then the forms for the circumstantial *sdm.f* of 2æ *geminatæ* verbs like *ḳbb*, would require that the accent stress fall in the second syllable, i.e. **ḳ̆b̆bif*. The vocalization that survives into Coptic (*ehnăf/ehnêf*) indicates that the circumstantial *sdm.f* was vocalized with a stressed vowel immediately preceding the suffix, for those verbs of the 2æ *litteræ* (*mediae waw*) class at least. The vocalization on the second syllable of *ḳbb* (= *ḳ̆b̆bif*) also looks suspiciously like the infinitive of this verb class (Coptic: *ḳbŏb* < **ḳbăb*).

Since the rule that two identical radicals are represented only once graphemically is attested quite heavily in the Coptic lexicalizations of the prospective *sdm.f*, the necessity of retaining this rule will not allow us to generalize for all verb classes the final stress of the survival of the circumstantial *sdm.f*, (*ehnă-f*). This difference in stress position, also supports the probability that we are dealing with suppletion and a number of different result nominalizations.

Other Afroasiatic languages show multiple result nominalizations. Arabic shows both *jamᶜun* and *jummăᶜun* 'collection' from the same root, and a great number of patterns are available to choose from.

There is evidence, however, that the allomorphic hypothesis deserves serious consideration. On the one hand, all Coptic survivals show final stress on the case vowel, and since both the prospective *sdm.f* and the circumstantial *sdm.f* can be used without any introductory word in dependent clauses, it seems logical to suppose that final stress was necessary to make the case vowel sufficiently audible to avoid ambiguity. Also, the indicative *sdm.f* and the prospective *sdm.f* forms differ only in the case of three verbs, *iwi*, *ini* and *rdi*. The first two have suppletive forms in *-t*, but with this small concession to suppletion, it is very tempting to conclude that we are dealing with only one result nominalization, particularly if we conclude that the form *rdi* with a retained initial *r* is simply a historical anomaly.

Secondly, it may be possible that the form **ḳ̆b̆bif* is a secondary development by a mistaken analogy with verbs with a third weak radical (e.g. *iri* 'do'). The circumstantial *sdm.f* form of such a verb with a third weak radical may have originally been stressed on the final syllable, something on the order of **ĭr̆iif*, and since the final weak radical *i* is homorganic with the stressed case vowel, metathesis may have occurred, i.e. something like **ĭriĭf*. If this were then extended by analogy to verbs of identical second and third radicals, something like **ḳ̆bĭb̆f* might have resulted. Thus the *sdm.f* system (excluding the emphatic *sdm.f*) could be explained allophonically.

On the basis of the foregoing, there does not seem to be sufficiently conclusive evidence for one hypothesis over the other, although the multiple result hypothesis seems far more credible

and far less hypothetical than the hypothesis of allomorphic variation. There does not seem to be terribly more that can be said about the problem of the verbal stems from our present state of knowledge.

7. CONCLUSION

The aphorism that I first heard from Talmy Givón to the effect that morphology is the archeology of syntax, certainly seems to apply to the development of the various *sdm.f* forms, if what I have sketched above is anything near the truth. That case endings and verbal tenses should be historically related seems a bizarre claim, and yet the suspicion that this might be the case for Classical Arabic, for instance, has been circulating for centuries, ever since Arab scholars first noticed the parallelism of the charateristic case vowels -*u/a/i* to the indicative/subjunctive/jussive endings -*u/a/ø*. At any rate, the case hypothesis that I have now presented would have at least the advantage of showing the structures of the Semitic and Egyptian families to be far more closely related than previously believed.

APPENDIX

In order to put the case hypothesis of the origin of the various forms of the *sdm.f* into a better perspective, I would like to indicate to the reader how I believe the other tenses and forms of the Egyptian verbal system may have developed. Detailed justification for this development must wait, since a large number of questions require a detailed discussion. Nevertheless, I do not think it amiss to indicate what I think may have been the general lines of development of the Egyptian verbal system.

It seems probable that the remaining forms of the suffix conjugation must have originally been in the nominative case. The emphatic *sdm.f* (*mrr.f* form) seems to be something like a manner nominalization, with the meaning of 'the way he hears'. As such I would derive it from the imperfective passive participle. From *f3i* 'carry' this would yield the meaning REGULAR LOAD or CUSTOMARY LOAD and this would be tantamount to a manner nominalization 'how he carries'.

In the case of the *sdm.hr.f* form I suspect we are dealing with the preposition *hr* 'vis-à-vis', as Gardiner (1966), §427 suggests. The stem seems to show gemination, and probably both perfective and imperfective passive participles are admitted into the construction. The basic meaning of this form is that of logical necessity, such as in the mathematical statements where 'ten and ten make (*iri.hr*) twenty'. The total construction using *f3i* 'carry' may have originally meant 'a load is vis-à-vis him' for *f3i.hr.f*, implying that a load is what the subject of the sentence faces as consequence of the logical structure of the world, or of a special situation (such as practicing medicine).

As far as the *sdm.in.f* form is concerned, the situation is obscure. The meaning seems clearly to be that of subsequent action, and the etymologies proposed in Gardiner (1966) 344 that it either originally meant 'heard by him' (i.e. a load by him) or 'heard--said he' both seem difficult to accept as yielding the required meaning of 'he then heard'. My tentative suggestion is that the *in* element is an old demonstrative related to the neutral-plural series *nw.n3.nn.nf3*. It is generally assumed that the neutral meaning 'this thing', 'this experience' is the original meaning of this series and that it came to signify the plural only later. If there existed an old demonstrative *in* with the same sort of meaning, then *f3i.in.f* would have originally meant 'a load is his thing', i.e. a load is what he got for all of his trouble. This would also explain why *in* is used in cleft sentences and in interrogative sentences.

(62)   *in hm.f rdi.(y) iri-tw.f*   (Gardiner (1966), 373.1)
       in majesty-his cause-PARTICIPLE do-PROS.-one-it
       'It was His Majesty who caused that it be done.'

(63) *in d3(i).n.k n.i z....*   (Gardiner (1966), 493.2)
      in ferry-PAST-you to-me man
      'Have you ferried a man across to me...'

Thus (62) would have originally meant: 'the thing of His Majesty is that which caused that it be done'. Likewise the incredulous question (63) would have originally meant 'the thing is you have ferried a man over to me...?'.

In the absence of any direct evidence for the existence of a proto-Egyptian demonstrative *in*, one cannot be certain that the above is correct. Of the various etymologies proposed for this form, however, it is certainly not true that *in* is a preposition in historical Egyptian, since it does not take suffix pronouns when it means 'by him' for example. The form that is actually used is that of (64):

(64) *sdm ntf*
      hearing his-thing
      'hearing by him'

This actually supports the demonstrative hypothesis in my opinion, since *ntf* is also known to be a noun (or expression) meaning 'its contents'. (Gardiner (1966), §114.4).

As far as the *sdm.n.f* form is concerned, I am prepared to accept Gardiner's hypothesis for its origin in *f3i.n.f* 'a load is to him'. (Gardiner (1966), 411.2). As Gardiner notes, there is nothing in this etymology to require that it refer to the past, and in fact the negative form *n sdm.n.f* 'he does not hear' or 'he cannot hear' refers to a timeless state of affairs. When it has past meaning there is always either a time expression or its equivalent, or some other focusing element, such as *iw* 'what has come to pass/the resulting present situation' or *nk* 'behold'. Needless to say a string of *sdm.f* forms may all share one of these focusing elements. Thus *iw f3i.n.f* would have originally meant 'what-has-happened (*iw*) is that a load is to him'.

As far as the *sdmt.f* form is concerned, it seems to refer to an action anterior to the time of the narrative ('when I had heard', 'when he had not yet heard =' before he heard', or 'until he heard'). The best explanation heretofore is that of Gunn (1924) ch. XXII to the effect that the base is an infinitive, i.e. a NOMEN ACTIONIS. If so 'when I had heard' < '(on) my hearing' and 'when he had not heard' < 'on his not hearing' would have been used as absolute adverbial time expressions, whereas 'until he heard' (*r sdmt.f*) would be an adverbial consisting of preposition + infinitive. Since the *sdmt.f* form is never used as a subject, it is unlikely it originated from an infinitive in the nominative case. Its use after the preposition *r* and more rarely after *dr* 'since' may indicate that we are dealing with an original genitive case.

As for the active participles, I would suggest that they are nisbe adjectives in -*y* formed on the base of the passive participles. The *sdm.ty.(fy)* form would be a nisbe formed on the nomen actionis of the *sdmt.f*. The negative complement is an adverbial ending in -*w*, parallel to other well known ones such as *hntw* 'from now on' and *hftw* 'accordingly'. Lastly, I would accept Lexa's hypothesis for the *sdm.k3.f* form as 'a load is what he plans'. (Gardiner (1966), §427.

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FIRST NORTH-AMERICAN CONFERENCE ON SEMITIC LINGUISTICS

Santa Barbara, California
March 24-25, 1973

The first North-American Conference on Semitic Linguistics was organized by Robert Hetzron (University of California, Santa Barbara) with the cooperation of Giorgio Buccellati (University of California, Los Angeles) and Joseph L. Malone (Barnard College--Columbia University). The purpose of the Conference is to promote the interest of Semitists in the various modern currents of linguistics. The full list of the papers presented at the 1973 Conference is given below. Those papers which have been submitted and accepted for inclusion in *AAL*, like the present one, are being published within the framework of the journal.

A. Semitic and its Afroasiatic Cousins

1. Carleton T. Hodge (University of Indiana), *The Nominal Sentence in Semitic* (=*AAL*2/4).
2. G. Janssens (University of Ghent, Belgium), *The Semitic Verbal System* (=*AAL* 2/4).
3. J. B. Callender (UCLA), *Afroasiatic Cases and the Formation of Ancient Egyptian Verbal Constructions with Possessive Suffixes* (=*AAL* 2/6).
4. Russell G. Schuh (UCLA), *The Chadic Verbal System and its Afroasiatic Nature* (forthcoming in *AAL*).
5. Andrzej Zaborski (University of Cracow, Poland), *The Semitic External Plural in an Afroasiatic Perspective* (forthcoming in *AAL*).

B. Ancient Semitic Languages

6. Giorgio Buccellati (UCLA), *On the Akkadian "Attributive" Genitive* (forthcoming in *AAL*).
7. Daniel Ronnie Cohen (Columbia University), *Subject and Object in Biblical Aramaic: A Functional Approach Based on Form-Content Analysis* (=*AAL*2/1).
8. Richard Steiner (Touro College, N.Y.), *Evidence from a Conditioned Sound Change for Lateral ḍ in Pre-Aramaic.*
9. Stanislav Segert (UCLA), *Verbal Categories of Some Northwest Semitic Languages: A Didactical Approach* (=*AAL*2/5).
10. Charles Krahmalkov (University of Michigan), *On the Noun with Heavy Suffixes in Punic.*

C. Hebrew

11. Joseph L. Malone (Barnard College--Columbia University), *Systematic vs. Autonomous Phonemics and the Hebrew Grapheme "dagesh"* (=*AAL*2/7).
12. Allan D. Corré (University of Wisconsin, Milwaukee), *"Wāw" and "Digamma"* (forthcoming in *AAL*).
13. Harvey Minkoff (Hunter College, N.Y.), *A Feature Analysis of the Development of Hebrew Cursive Scripts* (=*AAL*1/7).
14. Raphael Nir (Hebrew University, Jerusalem), *The Survival of Obsolete Hebrew Words in Idiomatic Expressions* (=*AAL* 2/3).
15. Talmy Givón (UCLA), *On the Role of Perceptual Clues in Hebrew Relativization* (=*AAL*2/8).
16. Alan C. Harris (UCLA), *The Relativization "which that is" in Israeli Hebrew.*

D. Arabic

17. Ariel A. Bloch (University of California, Berkeley), *Direct and Indirect Relative Clauses in Arabic.*
18. Frederic J. Cadora (Ohio State University), *Some Features of the Development of Telescoped Words in Arabic Dialects and the Status of Koiné II.*

E. Ethiopian

19. Gene B. Gragg (University of Chicago), *Morpheme Structure Conditions and Underlying Form in Amharic* (forthcoming in *AAL*).
20. C. Douglas Johnson (University of California, Santa Barbara), *Phonological Channels in Chaha* (=*AAL* 2/2).
21. Robert Hetzron (University of California, Santa Barbara), *The t-Converb in Western Gurage and the Role of Analogy in Historical Morphology* (=*AAL*2/2).

F. Beyond Afroasiatic

22. Gilbert B. Davidowitz (New York), *Cognate Afroasiatic and Indoeuropean Affixes: Conjugational Person-Markers.*

ASSUR

ASSUR is meant to serve the needs of the specialized field which is closely identified with the study of Assyrian as a dialect of Akkadian and with the history of Assyria as a special aspect of Mesopotamian civilization, from early times down to the end of the Assyrian empire. Given the intensity of linguistic and historical exchanges with neighboring regions, it is clear that the study of Assyrian dialect and history cannot be carried on in isolation, without due consideration to influences deriving from contacts with other people. Hence, ASSUR will also accept articles which are not exclusively Assyrian in scope, as long as they are related to Assyria and useful for the study of its language and history.

Forms of the alleged irregular and defective verb *nass, reconstructed as occurring in Middle and Neo-Assyrian texts, are in fact to be understood as forms of the verb našû—and hence *nass is to be stricken from the dictionaries. The argumentation is based on five considerations. (1) Forms assigned to našû and *nass respectively are in perfect complementary distribution: missing forms of našû are covered by *nass and vice versa. (2) Semantically, both verbs are used in exactly the same function. (3) The paradigm is morphologically perfect in the sense that all forms of *nass conform to the paradigm of našû as known from the Old Assyrian period (in which no forms of *nass are attested). (4) There is firm evidence for the validity of the change /š/ > /s/ in the phonological system of Neo-Assyrian. (5) Writings with <ṣa> and <ṣu> stand for phonemic /ssa/ and /ssu/.

The publication of new texts has led to the identification of some of the eponyms mentioned in the steles of Assur. An analysis of the data results in a negative conclusion with regard to the possibility of arranging the steles in groups characterized by internal chronological coherence. The original sequence has been lost, and even within the same group there are steles dated to disparate periods, even if they are all Middle-Assyrian. Possibly, a subdivision may be suggested between the steles placed to the North, which may be rather late, and those placed to the South, which may be dated to the period of greatest power—but this differentiation might be accidental.

The article contains new documentary evidence on horses in Neo-Assyrian times, including the copies, transliterations and translations of three hitherto unpublished and four other texts from Nineveh. The discussion of the data provides an analysis of the internal structure and the nature of the texts. In one group, the horses are classified according to their color, sex and (possibly) age; these texts probably represent the preliminary listing of incoming animals, drawn up for internal use by the administrative unit of the palace in charge of horses. Another group consists of memoranda on specific quantities of horses, which are reports sent daily to the king by the same administrative unit, to provide an "ephemeral" (i.e. not destined to archival files) account of events.

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